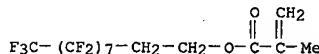


CM 6

CRN 1996-88-9
CMF C14 H9 F17 O2

L78 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2003 ACS on STN
 AN 1992:409914 HCAPLUS
 DN 117:9914
 TI Fluoro(meth)acrylate esters and their coatings for heat-resistant optical fibers
 IN Yokoshima, Minoru
 PA Nippon Kayaku Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM C07C069-653
 ICS C03C025-02; C08F020-22; C09D004-02; G02B006-44
 CC 42-7 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 35, 73
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03215453	A2	19910920	JP 1990-8154	19900119
JP 2801719	B2	19980921		
PRAI JP 1990-8154		19900119		
OS MARPAT 117:9914				

AB The title (meth)acrylates are $\text{QO}(\text{CH}_2\text{)}_2(\text{CF}_2\text{)}_4(\text{CH}_2\text{)}_2\text{OQ}$ [I; Q = $\text{CH}_2\text{:CRCO}_2\text{CH}_2\text{CH}(\text{OH})\text{CH}_2\text{O}$, R = H, Me]. Thus, 3:97 mixt. of Irgocure 184 and I [R = H; from acrylic acid, epichlorohydrin, and $\text{HO}(\text{CH}_2\text{)}_2(\text{CF}_2\text{)}_4(\text{CH}_2\text{)}_2\text{OH}$] showed water absorption 0.5% and elongation at break 51% (23.degree.) initially and 50% after 1 mo at 150.degree., which was used to coat on optical fibers and cured with UV rays to give fibers without any transmission loss at 150.degree. for 1 mo.
 ST heat resistant coating optical fiber; fluoro acrylic coating optical fiber; octafluoroctanediol epoxidized diacrylate polymer coating
 IT Optical fibers
 heat-resistant coatings for, epoxidized octafluoroctanediol di(meth)acrylate polymers as)
 IT Fluoropolymers
 RL: TEM (Technical or engineered material use); USES (Uses)
 (epoxy, acrylates, coatings, heat-resistant, for optical fibers)
 IT Acrylic polymers, preparation
 RL: PREP (Preparation)
 (fluorine-contg., epoxidized, heat-resistant coatings, for optical fibers)
 IT Epoxy resins, compounds
 RL: TEM (Technical or engineered material use); USES (Uses)
 (fluorine-contg., acrylates, coatings, heat-resistant, for optical fibers)

IT Coating materials
(heat-resistant, octafluoroctanediol diepichlorohydrin ether
di(meth)acrylate polymers, for optical fibers)

IT 139011-87-3 139011-90-4 139011-91-9
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, heat-resistant, for optical fibers)

IT 79-10-7, Acrylic acid, reactions 79-41-4, Methacrylic acid, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(esterification of, with epoxidized octafluoroctanediol)

IT 83192-87-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(etherification of, with epichlorohydrin)

IT 106-89-8, Epichlorohydrin, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(etherification of, with octafluoroctanediol)

IT 139011-88-4P 139011-89-5P
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and polymn. of, for coatings for optical
fibers)

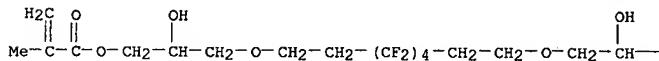
IT 139011-90-8 139011-91-9
RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, heat-resistant, for optical fibers)

RN 139011-90-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (3,3,4,4,5,5,6,6-octafluoro-1,8-
octanediy)bis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with
(chloromethyl)oxirane polymer with 4,4'-(1-methylethylidene)bis[phenol]
2-propenoate and (3,3,4,4,5,5,6,6-octafluoro-1,8-octanediy)bis[oxy(2-
hydroxy-3,1-propanediyl)] di-2-propenoate (SCI) (CA INDEX NAME)

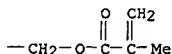
CM 1

CRN 139011-89-5
CMF C22 H30 F8 O8

PAGE 1-A



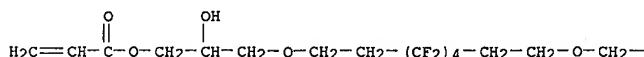
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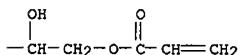
CM 2

CRN 139011-88-4
CMF C20 H26 F8 O8

PAGE 1-A



PAGE 1-B

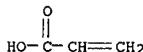


CM 3

CRN 55818-57-0
 CMF (C15 H16 O2 . C3 H5 Cl O)x . x C3 H4 O2

CM 4

CRN 79-10-7
 CMF C3 H4 O2

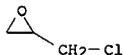


CM 5

CRN 25068-38-6
 CMF (C15 H16 O2 . C3 H5 Cl O)x
 CCI PMS

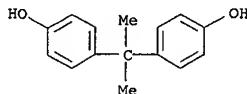
CM 6

CRN 106-89-8
 CMF C3 H5 Cl O



CM 7

CRN 80-05-7
 CMF C15 H16 O2

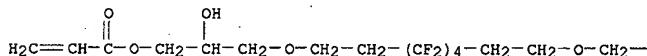


RN: 139011-91-9 HCAPLUS
 CN: 2-Propenoic acid, (3,3,4,4,5,5,6,6-octafluoro-1,8-octanediyil)bis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with (chloromethyl)oxirane polymer with 4,4'-(1-methyléthylidene)bis[phenol] 2-propenoate (9CI) (CA INDEX NAME)

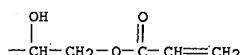
CM 1

CRN 139011-88-4
CMF C20 H26 F8 O8

PAGE 1-A



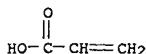
PAGE 1-B



CM 2

CRN 55818-57-0
CMF (C15 H16 O2 . C3 H5 Cl O)x . x C3 H4 O2

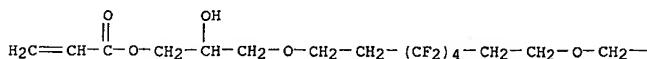
CM 3

CRN 79-10-7
CMF C3 H4 O2

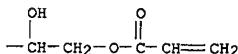
CM 4

CRN 25068-38-6
CMF (C15 H16 O2 . C3 H5 Cl O)x
CCI PMS

PAGE 1-A



PAGE 1-B

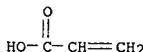


CM 3

CRN 55818-57-0
 CMF (C15 H16 O2 . C3 H5 Cl O)x . x C3 H4 O2

CM 4

CRN 79-10-7
 CMF C3 H4 O2

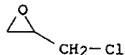


CM 5

CRN 25068-38-6
 CMF (C15 H16 O2 . C3 H5 Cl O)x
 CCI PMS

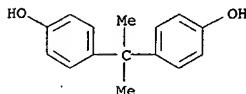
CM 6

CRN 106-89-8
 CMF C3 H5 Cl O



CM 7

CRN 80-05-7
 CMF C15 H16 O2

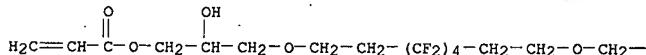


RN 139011-91-9 HCAPLUS
 CN 2-Propenoic acid, (3,3,4,4,5,5,6,6-octafluoro-1,8-octanediyil)bis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with (chloromethyl)oxirane polymer with 4,4'-(1-methyléthylidene)bis[phenol] 2-propenoate (9CI) (CA INDEX NAME)

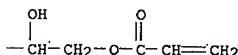
CM 1

CRN 139011-88-4
 CMF C20 H26 F8 O8

PAGE 1-A



PAGE 1-B

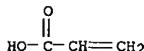


CM 2

CRN 55818-57-0
 CMF (C15 H16 O2 . C3 H5 Cl O)x . x C3 H4 O2

CM 3

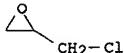
CRN 79-10-7
 CMF C3 H4 O2



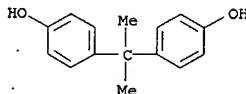
CM 4

CRN 25068-38-6
 CMF (C15 H16 O2 . C3 H5 Cl O)x .
 CCI PMS

CM 5

CRN 106-89-8
CMF C3 H5 Cl O

CM 6

CRN 80-05-7
CMF C15 H16 O2L78 ANSWER 5 OF 8 HCPLUS COPYRIGHT 2003 ACS on STN
AN 1992:215926 HCPLUS

DN 116:215926

TI Broad-band high-numerical aperture plastic-clad optical fibers

IN Nishimoto, Hiroaki; Mishima, Takayuki

PA Sumitomo Electric Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM. G02B006-18

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 73

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03245108	A2	19911031	JP 1990-43402	19900223
JP 3132729	B2	20010205		
US 5123076	A	19920616	US 1991-658876	19910222

PRAI JP 1990-43402 A 19900223

AB The title optical fibers satisfy conditions of (1) n of the cured clad resin at practical wavelength is 97-98.5% that of edge of the core, (2) light transmission of the cured clad resin at a practical wavelength 500-4000 dB/km, and (3) linear expansion coeff. of the cured clad resin $l_{toreq} < 2.0 \times 10^{-4}/\text{degree.C}$. Thus, an optical fiber comprising Ge-doped quartz core and fluorinated acrylate polymer clad had core $n = 1.474$ (at center) and 1.455 (at edge), clad $n = 1.420$, clad light transmission 2960 dB/km, clad linear expansion coeff. $0.00013/\text{degree.C}$, transmission band 89 MHz, and transmission loss 6.22 dB.

ST broad band optical fiber; high numerical aperture optical fiber; glass core optical fiber; fluorinated acrylate polymer optical